Serial No.: 10/015,042

Amendments to the Specification

Please replace the paragraph beginning at Page 9, line 6 with the following paragraph:

The crux of this invention is the mixed catalyst zone 16 in which is disposed a mixture of water-gas shift catalyst and methanation catalyst. As known to those skilled in the art, the water-gas shift reaction

$$CO + H_2O \rightarrow H_2 + CO_2$$

is exothermic whereas and the preferred methanation reaction

$$CO + 3H_2 \rightarrow CH_4 + H_2O$$

is endothermic also exothermic. We have found that by mixing the water-gas shift catalyst with the methanation catalyst, a synergistic effect is created whereby the heat released by the exothermic water-gas shift reaction can be employed as a means for controlling conditions in the selective methanation catalyst zone, for example reducing or even eliminating the requirement for auxiliary heat input to the methanation catalyst zone.